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ABSTRACT

Central Savannah River Area Cooperative Educational Services Agency (CSRA CESA) implemented a career education project for grades K-12 in the Columbia County School System to develop a replicable model for incremental improvements. The major emphasis was the infusion of career education activities into the teaching of basic skills. Program activities involved establishing career education resource centers in the libraries, providing professional materials for teacher use, developing a teacher advisor system for career guidance, and implementing a mini experience-based career education program. A draft set of career education activity handbooks was also developed for each grade or subject area. A longitudinal evaluation used these materials: Program of Exploration in Career Education Knowledge Test (PECE). Self Observation Scales (SOS), Senior High Assessment of Reading Performance (SHARP), Criterion Reference Testing on Career Development (CRT), and teacher questionnaire. PECE and CRT scores showed gradual improvement. SOS results were difficult to interpret since an alternate form was administered in the second year. Scores generally increased except for those for school affiliation. SHARP was administered only in 1979 and only interschool comparisons were made. Responses on the teacher survey which were similar to previous responses showed positive teacher attitudes toward career education. (YLB)

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Evaluation of CSRA CESA Project for Incremental Improvement in Career Education

INTRODUCTION

The main purpose of the career education project implemented in the Columbia County School System was to effect incremental improvements in two senior high schools, two junior high schools and nine elementary schools for replication by other systems in the CSRA CESA (Central Savannah River Area Cooperative Educational Services Agency) area and by other school systems throughout the state.

All nine elementary schools, K-7, two junior high schools, 8-9, and two senior high schools, 10-12, in the Columbia County School System participated in the implementation of the K-12 career education program. Career Education resource teachers were identified at each school to act as linking agents between the schools and the project staff. The project staff consisted of a locally funded Director, an elementary career education specialist, a junior high career education specialist, and a senior high career education specialist funded from the project.

The major emphasis in this project was the infusion of career education activities into the teaching of the basic skills. Career Education resource centers were established in the libraries of each school for student use. In addition, professional materials related to career education were placed in a centralized location for teacher use. At the junior and senior high school level a teacher advisor system was established to facilitate career guidance activities. Each teacher became an advisor for 20 to 30 students. Advisory meetings were conducted on a scheduled basis for one class period each month. At the senior high

school level a mini EBCE program was also implemented through the gifted program to provide students an opportunity to explore career areas of interest. Following a week of orientation, students in EBCE worked for one full week at a learning station they chose. They did not attend school during this week.

Community Resource Guides were made available to every teacher in the school system. Every school was given a "core" of career education curriculum and instructional material. A materials guide was also developed and given to every teacher for ease in locating different career education materials. In addition, a draft set of career education activity handbooks was developed at the end of the project for each grade, K-7, and each subject area, 8-12.

Staff development activities were conducted through faculty meetings, small group meetings, on a one-to-one basis, and through formal career education workshops. These activities were conducted by the Project Staff as well as the career education resource teachers.

The participants in this project for the Columbia County School System consisted of thirteen schools. A total of 408 teachers and 8,042 students were involved to some degree in its implementation and evaluation.

PROCESS

The process for the establishment and implementation of the project consisted of the following steps:

1. Employment of Project Staff

   Elementary Specialist, K-7
   Secondary Specialist, 8-12
   Project Director
   Career Educatin Aides

2. Orientation of Career Education Resource Teachers

3. Orientation at each Participating School

4. Review of Proposed Activities and Implementation

MODEL COMPONENTS

The following are descriptions of components implemented into the general program to facilitate the Career Education Program:

Elementary, K-7

Infusion Through Subject Areas: All teachers involved in the career education program were encouraged to:

1. relate the subjects being studied to real life situations
2. provide students opportunities to participate in activities which relate to various career areas
3. establish a classroom atmoshpere which provides students opportunities to develop good work habits, work values, and decision making and planning skills
4. help students understand themselves and others and develop positive self concepts
5. make career education visual through bulletin boards, posters, mobiles, display of student work, learning centers, etc.

Career Education Resource Centers in Library: In the library or media center, the librarians established career education centers where students could easily locate all available materials related to various career areas. These centers included informal reading materials, filmstrips and cassettes which students could use on an individual basis, attractive mobiles and posters which attract student interest, contests and games coordinated by the librarian, and center activities.

Career Guidance: In the classroom and through whatever means available, students were provided career guidance experiences which center on helping students understand themselves and others. Career Guidance was also a viable means of helping students develop good work values as well as providing an avenue for discussing career alternatives. One of the

major outcomes of career guidance was to help students develop positive self concepts.

Hands-On Activities: Where appropriate and feasible, students were given opportunities for hands-on activities as they studied the basic skills. Such activities allowed students an opportunity to use the skills and concepts learned and therefore reinforce the learning experience.

Junior High, 8-9

Infusion Through Subject Areas: Virtually the same type of activities as the Elementary Program.

Career Education Resource Centers in Library: These resource centers included the same type of material as outlined for the Elementary Program. In addition, more specific information on occupational clusters and specific careers was available to allow students opportunities to explore career alternatives. Information on the high school program was also in these centers.

Career Guidance: Students were provided career guidance experiences through the establishment of a Teacher Advisor System coordinated by the guidance counselor. Through this program each student met for one class period monthly with a Teacher Advisor. At the eighth and ninth grade levels the homeroom teacher served in the capacity of Teacher Advisor. The purpose of the system was to provide the teachers and students an informal avenue for career guidance and counseling. Topics covered included improving students' self awareness, work values and habits, decision making skills, career awareness, and knowledge of opportunites

for continued education, including the high school program. At least two resource speakers visited each advisory group during the year to discuss a career area of interest to the students.

PECE Program (part of the regular vocational program): A Program of Education for Career Education was offered to all 8th grade students at Columbia Junior High and one half of the eighth grade students at Evans Junior High. In this program, students attended a PECE Class one class period per day for one semester as a part of their regular instructional program. The program consisted of three phases: job shadowing, group guidance, and related classroom activities. The combination of these activities allowed students to develop a base of knowledge and experience for making future educational, vocational, and/or work decisions. PECE is exploratory in nature and is so designed to train or prepare students for specific occupations. This class gave students an opportunity to explore various career areas and specific job titles of interest within these careers.

Mini Prevocational Courses (part of the regular vocational program): Mini courses in home economics, industrial arts, and business education, provided ninth grade students opportunities for in-depth exploration in specific occupational areas. Activities, such as constructing small structures, preparing and serving food, and distributing and selling a product, enabled students to examine various work roles and acquire manipulative skills and knowledge related to particular occupational areas.

Senior High, 10-12

Infusion Through Subject Areas: Virtually the same type of activities

as the Elementary Program.

Career Education Resource Centers in Library: These resource centers included the same type of material as outlined for the elementary and junior high programs. In addition, information on post secondary educational institutions, such as colleges and universities, vocational and technical schools, was available to the students. The Job Bank Microfische, provided by the State Labor Department, was placed in the center to give students an opportunity to explore the job openings, requirements, and salaries currently available throughout the State of Georgia.

Career Guidance: The Teacher Advisor System similar to that offered at the junior high level, was provided for all students. Teacher Advisors were designated based on their interest in one of the fifteen occupational clusters. Students then chose an occupational cluster of interest to them and were then assigned to an appropriate advisor. The purpose of the teacher advisor system at this level was the same as that at the junior high level. More emphasis, however, was given toward improving students' knowledge of opportunities for continued education and/or employment as well as job seeking, getting, and holding skills. At least two resource speakers visited each advisory group during the year to discuss a career area of interest to the students.

Mini Experienced Based Career Education Program: Participation in EBCE provided students at all levels, 10-12, in the Gifted Program, opportunities for job shadowing experiences which relate the development of academic skills to selected occupational roles related to

student interest, ability, and career aspirations. Job sites provided opportunities for students to explore in depth areas of potential career interest (both vocational avocational) through contact with a resource person, through hands-on shadowing experiences, and through other career and related academic activities. Students visited a job site for one week. They gained a direct involvement with business, industry, labor community. Classroom projects and activities were correlated with the job site experience for a period of from six to nine weeks. It is hoped that this course can be developed and offered as a summer school elective course in 1979.

Salable Skills: This program was designed to provide all students with the opportunity to acquire a salable skill through the completion of a competency-based instructional approach. Specific job skills, with corresponding identified and verified competencies, were learned through enrollment in a variety and combination of courses in general, vocational, or exceptional child courses and/or programs.

Placement and Follow-up: Both job and educational placement and follow-up services are offered to all seniors through the guidance department and through various vocational programs. Support has been provided through installation of the Job Bank Microfische in the Library Resource Center and, in conjunction, a working relationship with the Georgia State Employment Service has been established. Hopefully, during 1978-79, job and educational placement services offered through the guidance department can be expanded.

Program Goals and Objectives

The following list of program goals and objectives for the career education model indicates the extent process and implementation have taken place within the Columbia County School District. This report does not evaluate the accomplishment of each goal and objective but does indirectly suggest through its statistical analysis a measure of success of each objective and goal.

Program Goal 1: (Elementary)

To develop and implement a career education model, grades K-7, in all nine Columbia County elementary schools.

1.1 To identify and describe model components for the elementary program.

1.2 To develop and implement the infusion component in at least 80% of all elementary classrooms representing all nine elementary schools.

1.3 To formulate and implement expanded hands-on alternatives in all nine elementary schools.

1.4 To formulate and implement the career guidance and counseling component in all nine elementary schools.

1.5 To formulate and establish a career education resource center in all nine elementary schools.

Program Goal 2: (Junior High School)

To develop and implement a career education model, grades 8 and 9, in all district junior high schools.

2.1 To identify and describe model components fot the junior high school program.

2.2 To develop and implement the exploration through subject area component in at least 80% of all junior high school classrooms.

2.3 To formulate and establish a career education resource center in both junior high schools.

2.4 To refine and implement the comprehensive career guidance

and counseling program (Teacher Advisor System) in both Junior high schools.

Program Goal 3: (Senior High School)

To develop and implement a career education model, grades 10-12, in all district senior high schools.

3.1 To identify and describe model components for the senior high school program.

3.2 To formulate and establish a career education resource center in both senior high schools.

3.3 To refine and implement the comprehensive career guidance and counseling program (Teacher Advisor System) in both senior high schools.

3.4 To develop and implement the exploration through subject areas component in at least 80% of all senior high classrooms.

3.5 To develop and implement an experienced-based career education program (EBCE) in both senior high schools.

3.6 To develop and implement a salable skills program in both senior high schools.

3.7 To develop and implement a system through which all graduates and early school leavers will be provided job placement services.

3.8 To develop and implement a system through which follow-up data is collected from graduates and early school leavers.

Program Goal 4: (Program Facilitation)

To develop and implement a plan which will enhance and facilitate the fulfillment, dissemination, and emulation of resultant products for each program model component.

4.1 To develop and implement a system which will provide community resource information including guidelines for utilization to all involved educators.

4.2 To develop and implement a system which will provide career education curriculum and instructional materials to all involved educators.

4.3 To refine and implement a plan which will disseminate information to CSRA-CESA-LEA's.

4.4 To develop and implement a plan which will provide technical

assistance to CSRA-CESA-LFA's.

4.5 To develop and implement a career education oriented staff development plan.

4.6 To develop and describe strategies directed at implementing all components of the career education model K-12.

Program Goal 5: (Evaluation)

To develop, validate and implement an evaluation design directed at collecting process and product data for all components of the career education model K-12.

5.1 To develop, in conjunction with a third party evaluator, an evaluation design directed at collecting process and student product data.

5.2 To implement the developed evaluation design.

5.3 To review and revise the evaluation design.

Program Goal 6: (Program Management)

To develop and implement a plan which will provide direction and assistance to the Career Education Staff in the attainment of program goals.

6.1 To develop and implement a managemant plan which reflects the individual responsibilities of all involved personnel.

6.2 To develop and implement a staffing plan including career education, district level and school-based personnel.

6.3 To develop and implement a system directed at involving district and school level administrators, parents, teachers, and community leaders.

6.4 To develop and implement a plan through which a working relationship is established between career education project staff and personnel involved in PECE, Mini- Pre- and CVAE Programs.

DESIGN

The process design (Table 1) indicates the factors that were necessary for implementation and evaluation of the Career Education Project. This design was implemented initially to accomplish the major goals and objectives previously indicated.

TABLE 1

Grades	Student Process Instrument	Career Education Resource Teacher Process Evaluator	Project Staff Evaluation	Student Process Evaluation	Principal, Counselor, Teacher Process Evaluation
Elementary	CRT SOS	Participation in Inservice No. & Types of Activities Conducted and Coordinated	Implementation of various career education components as outlined in Management Plan	No. Field Trip No. Resource Speakers Exposure to Bread & Butterflies	Participation in Inservice Use of Bread & Butterflies and DUSO for Career Guidance Attitude Completion of ICE Sheets
Elementary	PECE Test	Participation in Inservice No. & Types of Activities Conducted and Coordinated	Implementation of various career education components as outlined in Management Plan	No. Field Trip No. Resource Speakers Exposure to Bread & Butterflies	Participation in Inservice Use of Bread & Butterflies for Career Guidance Attitude Completion of ICE Sheets
Junior	PECE Test CRT SHARP	Participation in Inservice No. & Types of Activities Conducted and Coordinated	Implementation of various career education components as outlined in Management Plan	No. Field Trips No. Resource Speakers Career Exploration Act	Participation in Inservice Attitude Completion of ICE Sheets Use and effectiveness of Teacher Advisor System
Senior	PECE Test	Participation in Inservice	Implementation of various career education components as outlined in Management Plan	No. Field Trips No. Resource Speakers Use and effectiveness of Job Bank	Participation in Inservice Attitude Completion of ICE Sheets Use and effectiveness of Teacher Advisor System Implementation of Mini EBCE For Gifted

Schools to be involed, product & process: North Harlem Elementary (4), South Harlem Elementary (6), South Columbia Elementary (4 & 6), Columbia Junior High, Evans Junior High (9), Harlem High and Evans High (12)

CRT=Criterion Referenced Test in Career Development SOS=Self Observation Scale
PECE=Program of Education for Career Exploration SHARP=Senior High Assessment of Reading Performance

INSTRUMENTATION

As indicated by Table 1, a number of instruments were used to determine both the student and teacher advancement over the three year length of the Project. This final evaluation uses four process instruments in evaluating the Project. A description of these instruments follows:

The Program of Exploration in Career Education Knowledge Test (PECE)

Developed by the Georgia State Department of Vocational Education, the PECE was revised in 1971 by William D. Myrick and Joan Weiss. The test was developed for administration to students in Grades 5-12 and includes the variables of knowledge of occupations, occupational requirements, and occupational environments.

The test consists of 75 items (19 matching, 27 true-false, and 29 multiple-choice) relating to such things as career awareness, career training and career decisionmaking. It purports to measure a student's level of sophistication in matters pertaining to the world of work.

Self Observation Scales (SOS)

The SOS is a nationally normed, empirically validated, multi-dimensional instrument for measuring the way children perceive themselves (self-concept).

The primary level of the SOS measures four dimensions of children's self concept. Each scale is labeled in a positive manner with high scores being most characteristic of the scale name. Reliability estimate on a test/retest is 0.85. The scales are as follows:

Scale I. Self Acceptance

Children with high scores view themselves positively and attribute to themselves qualities of happiness, importance and general competence.

They see themselves as being valued by peers, family, and teachers. Children with low scores see themselves as unhappy, lacking in general competence and of little importance to others.

Scale II. Social Maturity

Children with high scores on this scale know how they are supposed to think and feel in a variety of social situations. They have learned the importance of such notions as "fair play," "sharing," "perserverance," "helpfulness," and "generosity." Children with low scores on this scale have not learned these notions and are likely to evidence behaviors that most adults would characterize as selfish, inconsiderate, or immature.

Scale III. School Affiliation

Children with high scores view school as a positive influence in their lives. They enjoy going to school, and they enjoy the activities associated with school. Children with low scores view school as an unhappy place to be. They do not enjoy most school related activities and are negative about the importance of school in their lives.

Scale IV. Self Security

Children with high scores report a high level of emotional confidence or stability. They feel that they are in reasonable control of the factors that affect their lives and spend little time worrying over possible troubles. Children with low scores on this scale worry a great deal. They are concerned that something bad may happen and report feelings of nervousness.

The Senior High Assessment of Reading Performance (SHARP)

The SHARP is a diagnostic and evaluative instrument that measures the ability of senior high school students to read and respond to materials typically encountered by adults in their daily lives.

It is intended that SHARP be used as a part of a diagnostic/prescriptive system through which students' needs are identified early enough for instructional intervention.

Criterion Reference Testing on Career Development (CRT)

The CRT is an inventory of the desired behaviors and performances in a skills and content area. This particular CRT was on Career Development and the specific objectives dealt with Self-Understanding, Work and Occupation, Education, and Decision Making.

Teacher Questionnaire

This questionnaire was developed to determine the extent to which each teacher participated in the project. It also elicited opinions concerning the teacher's perspective of the [illegible] of career development and its effect on students. A copy of the questionnaire can be found in Appendix C.

EVALUATION

This longitudinal evaluation took into consideration the instruments previously described and those students who have been a part of the Project for the years 1976-77, 1977-78, and 1978-79. An evaluation scheme for this purpose is outlined in Table 2.

TABLE 2

Evaluation Scheme

	1976-77		1977-78		1978-79	
SCHOOL	GRADE	TEST	GRADE	TEST	GRADE	TEST
South Columbia	3	SOS	4	SOS	5	SOS
	5	SOS	6	PECE	7	PECE
North Harlem	3	SOS	4	SOS		
South Harlem	5	SOS	6	PECE	5	SOS
Col. Jr. High	8	PECE	9	PECE	9	SHARP
Harlem High	11	PECE	12	PECE	10	PECE SHARP
Evan Jr. High	8	PECE	9	PECE	9	SHARP
Evans High	11	PECE	12	PECE	10	PECE
					12	SHARP

Results concerning administrations of the PECE, SOS, SHARP, CRT, and Teacher Questionnaire follow.

The PECE results are shown in Table 3. A roster of PECE scores is presented in the appendices. It can be seen that there was a gradual improvement, from 1976 to 1979, in PECE scores. The t tests for correlated means were computed for all possible pairs of groups of scores. The only significant findings (.001 significance level) were that the 1979 PECE results were superior to all prior PECE results.

TABLE 3

PECE Results

	Sample Size	Means for 1976-1979
1976-77 Pretest	108	110.5
1976-77 Posttest	103	110.8
1977-78 Pretest	124	111.8
1977-78 Posttest	118	112.1
1979	94	115.2

The SOS results are shown in Table 4. A roster of SOS scores is presented in the appendices. The t tests for correlated means were computed for each portion of the SOS. For Self-Acceptance, there was no significant difference between scores for any of the three times the test was administered. For Social Maturity, the 1976-77 scores and the 1978-79 scores were both superior to the 1977-78 scores (significance at the .001 level). For School Affiliation, the 1976-77 scores and the 1977-78 scores were both superior to the

1978-79 scores (significance at the .001 level). For Self-Security, the 1976-77 scores were superior to the 1977-78 scores (significance at the .10 level), the 1978-79 scores were superior to the 1976-77 scores (significance at the .06 level), and the 1978-79 scores were superior to the 1977-78 scores (significance at the .001 level).

These results are tempered by the fact that the test used in 1977-78 was referred to as an "intermediate test," whereas the 1976-77 and 1978-79 tests were referred to as "elementary tests."

TABLE 4

SOS Results

Period	Sample Size	Self-Acceptance	Social Maturity	School Affiliation	Self-Security
1976-77	111	50.3	54.3	52.6	50.4
1977-78	133	51.3	49.4	51.7	49.3
1978-79	108	51.0	54.3	43.8	53.9

The SHARP results are shown in Table 5. It can be seen that Evans Junior High scored generally higher than Columbia Junior High and Evans High School scored generally higher than Harlem High School.

TABLE 5

Means for Portions of SHARP
(Administered May 1979)

		Portion of Test			
School	n	Section 1	Section 2	Section 3	Total
Columbia Junior High	237	31.2	31.8	29.7	92.7
Evans Junior High	452	32.9	33.2	31.6	97.6
Harlem High	116	35.3	35.8	34.7	105.8
Evans High	252	36.4	36.7	35.3	108.4

The CRT results for Grade 4 are shown in Table 6. Sign tests were used to obtain the following results. In 1977, South Columbia Elementary scored significantly higher than North Harlem Elementary (at the .001 level).

The 1979 Georgia scores were significantly higher than the 1977 North Harlem Elementary scores (at the .01 level). There was no significant difference between 1977 South Columbia Elementary scores and 1979 Georgia scores.

In 1979, South Columbia Elementary scored higher than both North Harlem Elementary and Georgia (at the .001 level). Georgia scores were higher than North Harlem scores (at the .05 level). The 1979 Columbia County scores were superior to the 1979 Georgia scores (at the .01 level).

In comparing 1977 scores with 1979 scores, North Harlem Elementary scored significantly higher in 1979 than in 1977 (at the .05 level). South Columbia Elementary scored significantly higher in 1979 than in 1977 (at the .01 level).

TABLE 6

CRT Results for Careeer Development (Grade 4)

Area	Percent of Students Achieving Objectives																			
	Self-Understanding							Work and Occupation						Education			Decision Making			
Objective Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
North Harlem Elem. 1977	65	60	41	57	44	59	45	61	67	49	49	51	45	60	64	56	35	56	55	43
South Columbia Elem 1977	75	46	64	58	46	59	76	89	51	73	60	75	75	68	62	50	66	78	68	
North Harlem Elem 1979	54	58	67	78	57	80	64	65	44	57	60	63	72	48	58	59	71	76	66	60
South Columbia Elem 1979	82	82	74	85	76	85	82	87	61	80	94	81	92	65	80	83	85	93	84	71
Columbia County 1979	73	70	66	76	67	84	78	75	47	73	80	72	84	57	68	70	79	77	73	61
Georgia 1979	73	67	59	72	66	77	79	68	48	66	80	60	79	53	64	63	74	72	70	62

The CRT results for Grade 8 are shown in Table 7. Sign tests were used to obtain the following results. In 1977, Evans Junior High scored significantly higher than Columbia Junior High (at the .05 level). The 1979 Georgia scores were significantly higher than the Columbia Junior High 1977 scores (at the .05 level). There was no significant difference between the 1979 Georgia scores and the 1977 Evans Junior High scores, although the Georgia scores were higher in the "Work and Occupations" area and the Evans scores were higher in the "Self-Understanding" area.

In 1979, Evans Junior High scored higher than both Columbia Junior High and the Georgia scores (at the .001 level). The Georgia scores were higher than the Columbia Junior High scores (at the .01 level). The 1979 Columbia County scores were superior to the 1979 Georgia scores (at the .01 level).

In comparing 1977 scores with 1979 scores, there was no significant difference between Columbia Junior High 1977 scores and 1979 scores, although Columbia Junior High 1979 scores were superior to the 1977 scores in the "Work and Occupations" area. Evans Junior High scored significantly higher in 1979 than in 1977 (at the .01 level).

TABLE 7

CRT Results for Career Development (Grade 8)

Area	Percent of Students Achieving Objectives																			
	Self-Understanding							Education					Work and Occupation				Decision-Making			
Objective Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Columbia Junior High 1977	60	7[illegible]	72	63	87	58	61	36	77	57	84	61	51	43	34	33	83	65	64	50
Evans Junior High 1977	72	71	78	70	91	64	68	44	72	75	88	69	50	40	43	41	86	63	74	51
[illegible]lumbia Junior High 1979	71	54	59	68	72	52	66	62	56	62	81	59	70	61	52	56	70	62	65	59
Evans Junior High 1979	74	79	81	72	83	70	74	77	77	77	87	73	79	67	65	66	90	78	74	73
Columbia County 1979	73	73	76	71	80	66	72	74	72	74	86	70	77	66	62	64	86	71	75	70
Georgia 1979	70	67	74	68	74	63	70	69	75	71	77	64	74	63	62	59	76	66	70	73

The results of the Teacher Survey - Activities Section are shown in Table 8. The Project Director supplied "preferred answers" to this questionnaire, based on goals and objectives of Columbia County. (A copy of the questionnaire is included in the appendices). All means were close to the preferred answers except for means for items 5, 10, 15, 16, and 24, which were slightly lower than preferred answer scores.

TABLE 8

Means for Responses to Teacher Survey (1978-79)

Activities Section

Points Assigned: Almost every day = 4, Once a week = 3, Once or twice a month = 2, Less than once a month = 1, Never = 0

1.	2.3	11.	1.8	21.	1.1
2.	1.2	12.	1.0	22.	0.4
3.	1.1	13.	0.6	23.	0.8
4.	0.9	14.	0.8	24.	1.5
5.	1.5	15.	1.5	25.	0.6
6.	1.4	16.	1.2	26.	0.5
7.	1.1	17.	0.6	27.	1.3
8.	0.3	18.	0.8	28.	1.7
9.	0.2	19.	1.1	29.	0.2
10.	0.8	20.	0.6	30.	Answers varied greatly with less emphasis on e and g.
				31.	Total of 397 hours.

The results of the Teacher Survey - Opinions Section are shown in Table 9. The Project Director supplied "preferred answers" to this questionnaire, based on goals and objectives of Columbia County. (A copy of the questionnaire is presented in the appendices). The means were close to the preferred answers, except that the means for items 6, 8, 12, 16, 23, 25, 28, 34, 39, and 40 were somewhat higher than preferred answer scores and the means for items 3, 10, 13, 20, 35, 36, 37, and 38 were somewhat lower than preferred answer scores. It should be noted that the previous survey answers parallel the 1978-79 answers closely, except for discrepancies in Item 41.

TABLE 9

Means for Responses to Teacher Survey

Opinion Section

The 1978-79 means are reported, as well as the means for the previous teacher survey, which are in parentheses. Points Assigned: Strongly Disagree = 1, Disagree = 2, Agree = 3, Strongly Agree = 4.

1.	2.9 (2.9)	15.	2.8 (2.9)	29.	2.2 (2.5)	41. A.	3.2 (3.2)
2.	1.9 (2.0)	16.	2.6 (2.2)	30.	2.1 (1.9)	B.	2.9 (1.6)
3.	2.3 (2.2)	17.	3.0 (3.0)	31.	3.0 (3.1)	C.	3.1 (1.6)
4.	3.1 (3.2)	18.	2.9 (2.8)	32.	3.3 (3.1)	D.	3.6 (1.9)
5.	2.1 (2.0)	19.	2.1 (1.9)	33.	3.1 (3.0)	E.	3.9 (1.9)
6.	2.7 (2.6)	20.	2.5 (2.7)	34.	2.4 (2.4)	F.	3.6 (1.8)
7.	2.0 (2.2)	21.	2.1 (2.2)	35.	2.7 (2.7)	G.	3.4 (3.5)
8.	2.9 (2.6)	22.	2.0 (1.8)	36.	2.7 (2.5)	H.	3.4 (3.9)
9.	2.2 (2.2)	23.	2.3 (2.2)	37.	2.4 (2.5)	I.	3.7 (1.2)
10.	2.5 (2.5)	24.	2.2 (2.1)	38.	2.1 (2.1)		
11.	3.0 (3.0)	25.	2.6 (2.3)	39.	2.2 (2.0)		
12.	2.4 (2.5)	26.	2.8 (2.8)	40.	2.3 (2.1)		
13.	2.7 (2.5)	27.	3.2 (3.0)				
14.	3.3 (3.3)	28.	2.6 (2.3)				

CONCLUSIONS

While the purpose of this evaluation was to present results and statistical anlyses rather than to make inferences regarding the data, a few conclusions are in order. The results of the PECE and the CRT provide strong evidence that the career education program in Columbia County was somewhat of a success. Scores improved for both the PECE and the CRT, and often were higher than Georgia norms.

The SOS results are difficult to interpret, since an alternate form of the test was administered in 1977-78. One point that may be worthy of further investigation is that the SOS scores for School Affiliation decreased in 1978-79 as compared to previous years.

The 1978-79 responses to the Teacher Survey (Opinion Section) were remarkably similar to previous teacher responses on this survey, the only discrepancy being in Item 41. In general, teachers seemed to feel good about career education.

In the light of these results, it seems that the goals and objectives for the career education program in Columbia County have been at least partially met. The results of this evaluation are generally positive, and Columbia County should be commended for a job well done.

Appendix A

PECE Scores

ID Number SOUTH COLUMBIA	1976-1977 Pre	1976-1977 Post	1977-1978 Pre	1977-1978 Post	1978-1979 Final
6170	103		102	99	106
6180	112	123	115		135
6190	98		101	111	121
6200	102	100	110	110	122
6230		99	103	96	94
6240	104	101	98	100	108
6250	114		117	123	125
6260		114	115	121	123
6660		109	115	112	
6750	106	106	112		115
6770	106	104	97	98	
6780		130	129	129	137
6800	115	93	97	103	
6470	113	116	132	130	130
6630	104	100	108	96	98
6610	99	107	101	105	
6620	107	118	124	116	126
6490	113	99	104	103	105
6510	104	112	99	97	107
6520	106	102	88	104	
6530	129		127		
6570	102	98	105	99	117
6580	104	100	99	102	102

ID Number SOUTH COLUMBIA	1976-1977 Pre	1976-1977 Post	1977-1978 Pre	1977-1978 Post	1978-1979 Final
6590	111	119	119	116	121
6600	103	112	104	123	118
6270	113		117	125	129
6300	103	101	103	106	126
6310		119	113		131
6340		128	103	103	121
6350	111	105	112	116	121
6380	103		112	111	
6640	108	107	108	96	100
6820		118	120		
6850		119			119
6720	109		108	102	118
6730	102	114	119	119	
6690	106	109	104	102	115
6150	106	101	106		115
6430	114	114	99	103	102
6450	102	107	110	104	110
SOUTH HARLEM					
9020		96	104	104	109
9040	104	107	97	99	119
9050			104	107	129
9070	101	103	107	106	122
9090	101	101	107	109	

ID Number SOUTH HARLEM	1976-1977 Pre	1976-1977 Post	1977-1978 Pre	1977-1978 Post	1978-1979 Final
9100	95	102	97	107	114
8870	104	105	110	111	118
8900	110	112	106	75	
8910	99	96	96	104	118
8920	117	115	113	115	118
8930		95	107	102	122
8940		113	123	124	131
8700	108	121	113	124	122
8710	113	108	107	118	130
8730	114	106	103	110	
8560	95	104	106	113	122
8570	116	118	109	117	128
8740	103		106	110	
8750	108		109	101	104
8760		103	108	107	
8770	111	108	100	100	
8360	110	108	115	120	
8380	113	106	110	110	121
8390	109		110	110	
8410	115	121	119	126	
8270	113	111	108	119	
8280	113	117	117	107	124
8290	117	111	103	116	124

ID Number SOUTH HARLEM	1976-1977 Pre	1976-1977 Post	1977-1978 Pre	1977-1978 Post	1978-1979 Final
8590	110		101	111	110
8600	107		106	114	127
8610	124		107	119	129
8630	119		125	100	131
8640	108	108	108	121	125
8650		91	102	108	120
8660	123	112	115	122	118
8670	99	116	127	129	
8680	124	116	116	123	128
8780	91	103	95	89	108
8800	117		100	96	101
8810	100	110	107	75	96
8830	104	104	99	102	113
8860	113	126	123	126	129
8140	101	105	110	108	107
8150	97	99	103	101	
8160	97	96	98	104	
8220	104	103	99	107	119
8230		104	100	107	115
8240	106	98	107	117	111
8420	100	110	103	108	117
8090		121	126	129	129
8100	114	102	118	116	126

ID Number SOUTH HARLEM	1976-1977 Pre	1976-1977 Post	1977-1978 Pre	1977-1978 Post	1978-1979 Final
8120	110		128	75	
8470	112	93	99	105	118
8480	120	106	100	111	108
8520	114	105	105	101	119
8540	108	107	117	127	121
8430	108	115	113	112	118
8440	99	114	109	112	120
8990	106	106	108	110	117
9010	104	100	105	106	113
913015	124	132	130	132	
913025	113	112	122	123	131
915004	123	126	125	119	131
915007		116	129	131	132
915016	128	133	132	133	133
916005	114	101	127	117	
916007	100		102	107	
916011	114		112	116	129
916012	125	124	120	127	124
916017	120	132	140	139	
919006	122	116	116	116	139
919022	132	127	134	137	
920026	118	136	134	136	137
923002	104		104		125
924019	117	124	126	127	

ID Number SOUTH HARLEM	1976-1977 Pre	1976-1977 Post	1977-1978 Pre	1977-1978 Post	1978-1979 Final
925032	127	137	135	138	138
927022	134	101	115	100	115
928016	128	125	126	128	
928024	131		131	126	130
929001	122	123	135	127	131
929007	114	124	118	103	
929021	114	112	109	97	107
929022	110	114	118	117	115
4410	127		137	141	
4420		128	128	134	
4690	113		119	120	
274690					
304410					139
314420					132

Appendix B

SOS Scores

SOS TEST SCORES

A = Self-Acceptance, B = Social Maturity, C = School Affiliation, D = Self-Security

ID Number	1976-1977				1977-1978				1978-1979			
NORTH HARLEM	A	B	C	D	A	B	C	D	A	B	C	D
091	55	54	55	52	53	55	56	58	60	49	61	49
149	41	49	57	46	40	42	54	61	45	42	29	58
089	26	34	29	41	34	27	62	46				
120					60	56	42	44	50	43	29	52
090	42	42	34	59	54	59	53	48	55	48	46	54
105	34	53	59	41	47	54	48	34	56	57	47	66
189	59	59	59	53	61	58	60	63				
166	41	52	61	43	25	35	36	31	32	42	35	35
138	53	53	47	44	58	50	41	38	41	55	32	40
114					36	47	37	43				
169	47	46	44	45	33	26	66	42	42	41	32	55
104	62	62	60	61	62	54	65	62	59	55	34	70
132	45	57	47	56	55	57	45	49	50	52	47	58
115	39	58	52	45	34	42	60	33	54	66	40	43
170	51	55	50	53	23	29	56	25	55	53	58	58
119	59	63	62	47	65	59	57	51				
123	36	53	56	43	54	53	61	35	53	53	55	38
125					57	62	34	56				
126	60	56	54	48	52	38	45	34	50	52	49	51
182					47	51	35	49	42	44	40	55
128	58	55	58	39	58	49	63	44	39	59	48	41
129	62	55	59	55	66	51	68	52	62	61	69	64

ID Number NORTH HARLEM	1976-1977				1977-1978				1978-1979			
	A	B	C	D	A	B	C	D	A	B	C	D
100	46	52	56	40	64	46	71	53				
001					42	45	51	41	31	51	22	48
103	59	53	61	49	51	47	37	30	45	50	44	36
160	50	49	49	43	61	51	53	59	59	59	44	63
135	60	57	56	52	60	57	64	57	59	59	44	63
165	54	54	58	45	52	55	50	50	43	57	38	58
190	65	56	58	61	57	40	69	57	62	58	56	63
109	46	47	46	41	45	21	53	40	42	54	48	38
191	61	59	57	65	33	37	52	40	62	56	61	63
192	49	58	60	47	57	48	64	49				
141	53	42	59	32	46	29	71	43	58	49	56	54
171	60	59	61	57	58	48	54	41	57	51	49	32
088	57	59	60	62	58	58	43	54				
117					59	63	44	53	61	58	50	66
145					59	57	53	58	54	53	46	70
173	51	43	49	34	32	30	38	44	48	49	30	57
178	61	61	60	64	51	45	46	55	48	49	30	57
097	60	65	61	58	61	55	65	60	62	59	58	61
181	45	55	59	41	47	52	34	42	44	54	37	50
157	54	59	58	46	43	59	51	49	45	52	28	61
131	43	50	57	40	58	57	50	42	61	53	56	58
184	45	57	48	41	39	51	43	41				
186	40	45	59	48	28	42	36	58	50	50	57	44
136	52	57	48	49	51	57	31	44	39	47	23	48

ID Number NORTH HARLEM	1976-1977				1977-1978				1978-1979			
	A	B	C	D	A	B	C	D	A	B	C	D
137	58	59	59	58	55	55	36	61	57	49	26	59
105					58	55	60	62	47	50	36	65
107	58	63	46	63	46	48	32	40	50	52	30	48
188	57	58	54	43	51	51	35	49	55	54	39	48
140	59	58	46	63	61	61	43	67	61	61	51	67
193	48	60	49	57	35	14	53	48	52	55	31	63
195	50	57	58	44	40	43	47	43	40	45	26	55
135					45	28	72	48	46	60	62	48
146	49	60	57	48	19	31	38	62	38	50	52	37
143	29	56	48	41	38	44	48	26	22	46	35	35
158	49	61	60	46	45	35	62	43	42	47	29	43
159	46	62	59	57	42	55	63	49	51	57	32	47
087	46	55	61	44	40	49	48	32	33	56	58	33
093	55	61	60	61	59	49	61	64	56	58	50	54
124	48	54	54	44	49	36	53	49	39	48	31	46
116	63	58	58	61	61	54	52	50	34	34	20	47
111	55	61	61	55	50	64	56	54				
152	48	61	53	46	52	57	50	40	51	53	22	70
153	45	55	52	58	53	43	63	37	50	52	31	39
121	61	63	54	61	59	57	59	57	61	57	51	63
094	51	49	28	58	47	53	44	61	51	51	38	56
095	63	61	59	64	64	52	65	58	61	63	57	66
147	46	57	41	49	46	52	39	46	46	58	39	48
176	57	59	61	50	57	63	36	53	56	49	24	67

ID Number	1976-1977				1977-1978				1978-1979			
NORTH HARLEM	A	B	C	D	A	B	C	D	A	B	C	D
156	43	44	59	45	58	53	39	52	61	52	58	45
127	36	53	57	43	54	42	68	41	46	62	60	39
096	45	58	61	38	37	44	58	41				
155					56	52	52	41	58	65	61	54
177					60	55	54	66	32	34	18	47
SOUTH COLUMBIA												
065	48	51	55	34	44	56	40	38	58	57	43	60
002	47	28	28	58	31	33	36	74				
047	50	60	59	52	61	53	62	63	61	62	46	52
068	43	52	45	42	38	46	47	58	59	61	48	63
057					60	56	60	63	55	57	39	67
026	55	51	60	39	46	49	55	30				
025	61	63	61	60	59	43	67	64	58	56	47	62
038	43	51	58	49	38	48	53	44	40	53	47	42
007	42	44	29	45	58	45	63	37	61	56	44	57
029	61	60	57	62	54	53	32	41	52	50	32	67
071	61	60	59	65	61	56	63	63	62	63	56	64
072	38	62	51	61	54	61	40	56	58	62	47	59
036	58	65	61	59	62	53	64	47	59	59	39	70
060	50	47	53	55	60	53	65	61				
061	63	48	59	59	59	53	59	69	63	58	53	68
077	49	56	56	44	56	54	48	53	55	60	54	58
081					25	13	56	36	47	45	43	49
021	54	60	58	55	50	60	33	34	42	57	34	41

ID Number	1976-1977				1977-1978				1978-1979			
SOUTH COLUMBIA	A	B	C	D	A	B	C	D	A	B	C	D
064					60	57	38	63	60	58	47	67
001	58	61	56	54	47	41	49	43				
022	60	52	53	57	63	46	67	61	59	59	45	67
045	41	48	55	47	51	40	64	28				
004	60	61	50	50	60	55	63	46				
008					55	59	47	61	63	62	60	67
011	37	32	18	66	30	36	34	66	5852		27	70
035	44	61	61	49	44	48	54	49	37	58	36	50
058	58	58	33	65	58	56	53	55				
038	55	49	57	39	46	42	56	48				
039	59	58	60	55	56	45	61	56	50	52	50	44
040					58	60	43	55	58	63	59	53
013	45	51	36	50	48	36	51	53	60	64	61	58
107					60	55	58	60				
042	57	52	60	43	61	51	63	48				
043	53	53	63	39	45	19	75	39	57	57	62	40
015	43	57	47	53	54	62	36	44	54	62	57	44
079	37	38	53	54	54	65	42	53	58	56	46	61
080	42	61	61	42	54	34	66	47	49	54	41	45
115	40	46	56	35	58	61	38	45	52	48	28	48
082	62	59	56	65	60	59	39	61	62	60	56	68
066	50	55	54	46	60	60	48	43	36	55	35	51
003	42	52	57	35	62	59	59	41	40	57	56	46

ID Number SOUTH COLUMBIA	1976-1977 A	B	C	D	1977-1978 A	B	C	D	1978-1979 A	B	C	D
073	60	49	39	52	62	50	45	67				
062	35	54	35	52	51	51	62	39	56	57	53	60
046					61	58	61	58				
014	33	27	19	61	48	33	47	65				
069	42	47	54	28	50	49	58	31	53	58	53	37
029	64	57	59	60	62	59	59	53	58	53	37	63
084	60	60	56	59	61	57	60	67	61	62	58	62
023	56	59	51	43	61	57	53	49	63	61	56	67
021					62	57	52	47	58	65	61	53
024	52	60	43	61	62	59	45	53	62	60	44	68
052					62	56	57	53	46	62	51	51
019	42	43	31	37	33	51	33	43	43	48	31	50
056	42	45	29	62	59	63	30	43	31	52	23	55
034	53	63	56	50	52	59	53	60	58	65	54	55
018	56	58	57	59	54	59	58	32				
016					37	58	42	35	50	58	41	50
006					51	55	45	57	49	53	47	49

Appendix C

Teacher Questionnaire

For copies of this questionaire please write:

Margaret Harper
Career Education Office
Columbia County School District
Appling, Ga.